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ADDITIONAL RECORDS OF MARINE ALGAE FROM NEW HAMPSHIRE*

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AT the turn of the century New Hampshire, with only 14 miles of coast line, was very conscious of its marine algal flora. When Collins, in 1900, published his preliminary list of New England Algae he included 120 species from this state, and he found six more during the next few years. Since then, however, New Hampshire's marine algae have been almost entirely neglected, and Taylor's recent excellent book on "Marine Algae of the Northeastern Coast of North America" makes it evident that Collins' 1900 list can no longer be considered complete.

Thanks to the generous hospitality of Professor C. F. Jackson, Director of the Marine Zoological Laboratory of the University of New Hampshire, the writer has had the opportunity of visiting this laboratory for short periods during two summers and collecting from New Hampshire stations among the Isles of Shoals. The products of these collections, and of collections along the coast in other seasons, added to the six species noted in the literature or exsiccatae since 1900, have resulted in the following 32 additional records to the state flora.

CHAETOMORPHA AEREA (Dillw.) Kütz. Star Is., July, 1938. 1940.

ENTEROMORPHA MICROCOCCA Kütz. Star Is., July, 1938. 1940.

ENTEROMORPHA PROLIFERA (Müll.) J. Ag. Star Is., July, 1938. 1940.

PROTODERMA MARINUM Reinke. Newcastle, May, 1900 (*Collins*, 1901).

* Contribution to the Biological Survey of New Hampshire.

- SPONGOMORPHA LANOSA (Roth) Kütz.,
 var. UNCIALIS (Müll.) Kjell. White Is., July, 1940.
- SPONGOMORPHA SPINESCENS Kütz. White Is., July, 1940.
- ULOTHRIX INPLEXA (Kütz.) Kütz. Little Boars Head, May, 1902 (*Hazen*, 1902).
- ULVA LACTUCA L., var. LATISSIMA (L.) DC. Little Bay, July, 1940.
- ASCOPHYLLUM NODOSUM (L.) LeJol,
 fa. SCORPIOIDES (Hornem.) Reinke. Portsmouth, April, 1938;
 May, 1940.
- CHORDARIA FLAGELLIFORMIS (Müll.) J. Ag.,
 var. Densa Farlow. Little Boars Head, May, 1940.
- DICTYOSIPHON FOENICULACEUS (Huds.) Grev.,
 var. HISPIDUS (Kjell.) Collins. Little Boars Head, May, 1940.
- ECTOCARPUS PENICILLATUS (C. Ag.) Kjell. Dredged off Lunging Is., July, 1938.
- ELACHISTEA LUBRICA Ruprecht. Star Is., July, 1938.
- FUCUS SPIRALIS L. Star Is., July, 1938. 1940.
- LAMINARIA DIGITATA (L.) Edmondson. Star Is., July, 1938. 1940.
 " " , var. ENSIFOLIA (LeJol.) Fos. White Is.,
 July, 1940.
- LAMINARIA INTERMEDIA Foslie,
 var. LONGIPES Foslie. Star Is., July, 1940.
- PUNCTARIA LATIFOLIA Grev. Star Is., July, 1938. 1940.
- RALFSIA BORNETI Kuckuck. Newcastle, May, 1900 (*Collins*,
 PB-A).
- SPHACELARIA CIRRHOSA (Roth) C. Ag.,
 fa. MERIDIONALIS Sauv. White Is., July, 1940.
- ACROCHAETIUM ALARIAE (Jons) Born. "New Hampshire"
 (*Collins*, 1906).
- ANTITHAMNION BOREALE (Gobi) Kjell. Dredged off Lunging Is.,
 July, 1938.
- ANTITHAMNION CRUCIATUM (C. Ag.) Näg. Star Is., July, 1938.
- CALLITHAMNION BAILEYI Harv. Little Bay, July, 1940.
- CALLITHAMNION TETRAGONUM (Wither.) C. Ag. Star Is., July,
 1940.
- CERAMIUM DIAPHANUM (Lightf.) Roth. Little Bay, July, 1940.
- CERAMIUM RUBRIFORME Kylin. Hampton Beach (leg. W.
 Hatch), May, 1938.
- DUMONTIA INCRASSATA (Müll.) Lamour. Hampton Beach,
 April, 1938.
- GRACILARIA FOLIIFERA (Forrskal) Børg. Little Bay, July, 1940.
- POLYSIPHONIA ELONGATA (Huds.) Harv. Portsmouth (leg. R.
 Thorne), Oct., 1940.
- PORPHYROPSIS COCCINEA (J. Ag.) Rosenv. Hampton (*Collins*,
 1903).
- RHODYMENIA PALMATA (L.) Grev. Star Is., July, 1938. 1940.

The writer is indebted to Dr. W. R. Taylor for making or confirming these identifications.

Specimens are in the author's collection and in the Isles of Shoals' Herbarium of the University of New Hampshire.



Fig. 1. ASCOPHYLLUM NODOSUM, fa. SCORPIOIDES.

Porphyropsis coccinea has the distinction of being found in New Hampshire and in no other New England state. Collins (1903) pointed this out, prophesying that it could not hold this distinction long, but, after nearly 40 years, the record still stands.

Of especial interest is *Ascophyllum nodosum*, fa. *scorpioides* which was found in fruit, sparsely in April of 1938 and abundantly in May of 1940. This is the first record of the occurrence of fruit in this form. *A. Mackaii* (Turn.) Holmes et Batters, which is found in similar habitats and closely resembles it in its vegetative

habit, has long tapering, often forked receptacles. The receptacles of *A. nodosum*, fa. *scorpioides*, on the other hand, are more or less oval, essentially similar to those of the type. The plants occupied their typical salt marsh habitat, associated with *A. nodosum* but easily distinguishable by their slender, tangled, subcylindrical branches and reduced bladders. The fruit suffered less reduction than the vegetative portion, and thus appeared by contrast very large. The receptacles were from oval to spatulate, yellowish, mostly simple, occasionally forked, on slender stalks. The fruiting portion was 0.4–1.6 cm. long, 0.2–0.7 cm. wide. The stalks were up to 2.5 cm. long, usually about 1.5 times the length of the fruiting portion. Only female receptacles were observed (FIG. 1).

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DARTMOUTH COLLEGE

ON THE NAME OF THE OAK FERN¹

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THE common Oak Fern of Europe and North America was originally described as *Polypodium Dryopteris* L. In order to avoid the tautonym *Dryopteris Dryopteris* in listing the species of *Dryopteris* for the Index Filicum, Christensen proposed the new name *Dryopteris Linnaeana*, which has since been generally accepted. It is the purpose of this paper to point out an earlier specific name, which must be applied to this fern.

The first such proposed is *Filix pumila* Gilib. (1792), but this is a *nomen abortivum*, since the Linnaean name *Polypodium Dryopteris* was cited in synonymy. It is, therefore, illegitimate

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